

For Research Use Only

# Recombinant Human B7-2/CD86 protein (Myc Tag, His Tag)



Catalog Number: Eg0059

## Basic Information

**ED50:**  
13-52 ng/mL

**GenelD:**  
942

**Species:**  
Human

**Accession:**  
P42081

**Purity:**  
>95 %, SDS-PAGE

## Technical Specifications

**Purity:**  
>95 %, SDS-PAGE

**Endotoxin Level:**  
<1.0 EU/  $\mu$ g protein, LAL method

**Source:**  
HEK293-derived Human B7-2 protein Leu26-Pro247 (Accession# P42081) with a Myc tag and a His tag at the C-terminus.

**Predicted Molecular Mass:**  
27.9 kDa

**SDS-PAGE:**  
40-70 kDa, reducing (R) conditions

**Formulation:**  
Lyophilized from sterile PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

## Biological Activity

Immobilized Human B7-2 (Myc tag, His tag) at 2  $\mu$ g/mL (100mL/well) can bind Human CTLA-4 (hFc tag, Myc tag, His tag) with a linear range of 13-52 ng/mL.

## Storage and Shipping

**Storage:**  
It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- 12 months from the date of receipt, -20°C to -80°C as lyophilized proteins.
- 3 months, -20°C to -80°C under sterile conditions after reconstitution.

**Shipping:**  
The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

## Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

## Background

CD86 (also known as B7-2) is a costimulatory molecule belonging to the immunoglobulin (Ig) superfamily. CD86 is primarily expressed on antigen-presenting cells (APCs), including B cells, dendritic cells, and macrophages. CD86 has strong structural similarity with another B7 family molecule, CD80 (B7-1). CD86 and CD80 are the ligands for two proteins at the cell surface of T cells, CD28 antigen and cytotoxic T-lymphocyte antigen 4 (CTLA-4). Binding of CD86 or CD80 with CD28 antigen is a costimulatory signal for T cell activation, proliferation, and cytokine production. Binding of CD86 or CD80 with CTLA-4 negatively regulates T cell activation and diminishes the immune response. However, CD86 and CD80 bind to CTLA-4 with higher affinity than CD28. Defects in CTLA-4-mediated transendocytosis of CD86 are associated with autoimmunity.

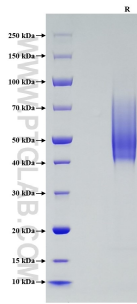
## References

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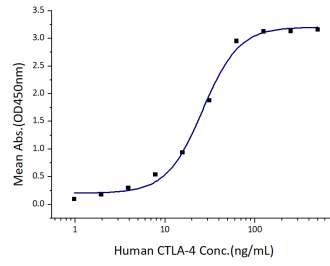
## Synonyms

B70, B7-2, BU63, CD28LG2, CD86, LAB72, MGC34413

## Selected Validation Data



Purity of Recombinant human B7-2 was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) conditions and stained using Coomassie blue.



Immobilized Human B7-2 (Myc tag, His tag) at 2  $\mu$ g/mL (100 $\mu$ L/well) can bind Human CTLA-4 (hFc tag, Myc tag, His tag) with a linear range of 13-52 ng/mL.

For technical support and original validation data for this product please contact

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